

Karl Jansen

List of Publications by Year in descending order

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53

papers

2,303

citations

186265

28

h-index

206112

48

g-index

53

all docs

53

docs citations

53

times ranked

746

citing authors

#	ARTICLE	IF	CITATIONS
1	O(α_s) improvement of lattice QCD with two flavors of Wilson quarks. Nuclear Physics B, 1998, 530, 185-203.	2.5	171
2	Chern-Simons currents and chiral fermions on the lattice. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1993, 301, 219-223.	4.1	143
3	Lattice calculation of parton distributions. Physical Review D, 2015, 92, .	4.7	137
4	A complete non-perturbative renormalization prescription for quasi-PDFs. Nuclear Physics B, 2017, 923, 394-415.	2.5	137
5	Light-Cone Parton Distribution Functions from Lattice QCD. Physical Review Letters, 2018, 121, 112001.	7.8	119
6	Light meson physics from maximally twisted mass lattice QCD. Journal of High Energy Physics, 2010, 2010, 1.	4.7	103
7	Updated lattice results for parton distributions. Physical Review D, 2017, 96, .	4.7	100
8	Transversity parton distribution functions from lattice QCD. Physical Review D, 2018, 98, .	4.7	91
9	The scattering length from maximally twisted mass lattice QCD. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 684, 268-274.	4.1	81
10	A polynomial hybrid Monte Carlo algorithm. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1997, 402, 328-334.	4.1	79
11	Phase diagram of a lattice $SU(2) \times SU(2)$ scalar-fermion model with naive and Wilson fermions. Nuclear Physics B, 1990, 344, 207-237.	2.5	71
12	Systematic uncertainties in parton distribution functions from lattice QCD simulations at the physical point. Physical Review D, 2019, 99, .	4.7	67
13	Unpolarized and Helicity Generalized Parton Distributions of the Proton within Lattice QCD. Physical Review Letters, 2020, 125, 262001.	7.8	63
14	tmLQCD: A program suite to simulate Wilson twisted mass lattice QCD. Computer Physics Communications, 2009, 180, 2717-2738.	7.5	59
15	Simulating twisted mass fermions at physical light, strange, and charm quark masses. Physical Review D, 2018, 98, .	4.7	58
16	Computing K and D meson masses with twisted mass lattice QCD. Computer Physics Communications, 2011, 182, 299-316.	7.5	56
17	Chiral fermions and anomalies on a finite lattice. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 288, 348-354.	4.1	49
18	Four-flavour leading-order hadronic contribution to the muon anomalous magnetic moment. Journal of High Energy Physics, 2014, 2014, 1.	4.7	48

#	ARTICLE	IF	CITATIONS
19	Critical momenta of lattice chiral fermions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1992, 296, 374-378.	4.1	43
20	Investigation of the domain wall fermion approach to chiral gauge theories on the lattice. Physical Review D, 1994, 49, 1606-1620.	4.7	40
21	The static-light meson spectrum from twisted mass lattice QCD. Journal of High Energy Physics, 2008, 2008, 058-058.	4.7	37
22	Implementation of Symanzik's improvement program for simulations of dynamical Wilson fermions in lattice QCD. Computer Physics Communications, 1997, 99, 221-234.	7.5	36
23	Parton distribution functions of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">\overline{\Lambda}_f = \overline{\Lambda}_f + \overline{\Lambda}_f \rangle$ on the lattice. Physical Review D, 2020, 102, .	4.7	34
24	\$\overline{\Lambda}_f\$ from the static potential for QCD with n_f dynamical quark flavors. Journal of High Energy Physics, 2012, 2012, 1.	4.7	33
25	Kramers equation algorithm for simulations of QCD with two flavors of Wilson fermions and gauge group SU(2). Nuclear Physics B, 1995, 453, 375-392.	2.5	32
26	Lattice continuum-limit study of nucleon parton quasidistribution functions. Physical Review D, 2021, 103, .	4.7	32
27	The PHMC algorithm for simulations of dynamical fermions I. Description and properties. Nuclear Physics B, 1999, 555, 395-431.	2.5	31
28	Lattice QCD Study of Transverse-Momentum Dependent Soft Function. Physical Review Letters, 2022, 128, 062002.	7.8	30
29	Improvement, generalization, and scheme conversion of Wilson-line operators on the lattice in the auxiliary field approach. Physical Review D, 2020, 101, .	4.7	28
30	Chiral condensate from the twisted mass Dirac operator spectrum. Journal of High Energy Physics, 2013, 2013, 1.	4.7	24
31	Flavor Decomposition for the Proton Helicity Parton Distribution Functions. Physical Review Letters, 2021, 126, 102003.	7.8	24
32	Flavor decomposition of the nucleon unpolarized, helicity, and transversity parton distribution functions from lattice QCD simulations. Physical Review D, 2021, 104, .	4.7	21
33	The PHMC algorithm for simulations of dynamical fermions II. Performance analysis. Nuclear Physics B, 1999, 555, 432-453.	2.5	20
34	Topological susceptibility from twisted mass fermions using spectral projectors and the gradient flow. Physical Review D, 2018, 97, .	4.7	20
35	Comparative benchmarks of full QCD algorithms. Computer Physics Communications, 2001, 136, 1-13.	7.5	18
36	Non-perturbative test of the Witten-Veneziano formula from lattice QCD. Journal of High Energy Physics, 2015, 2015, 1.	4.7	18

#	ARTICLE	IF	CITATIONS
37	Computation of parton distributions from the quasi-PDF approach at the physical point. EPJ Web of Conferences, 2018, 175, 14008.	0.3	16
38	Transversity GPDs of the proton from lattice QCD. Physical Review D, 2022, 105, .	4.7	15
39	Topological susceptibility from the twisted mass Dirac operator spectrum. Journal of High Energy Physics, 2014, 2014, 1.	4.7	14
40	Overlap valence quarks on a twisted mass sea: A case study for mixed action lattice QCD. Nuclear Physics B, 2013, 869, 131-163.	2.5	13
41	Leading hadronic contributions to the running of the electroweak coupling constants from lattice QCD. Journal of High Energy Physics, 2015, 2015, 1.	4.7	13
42	Strangeness of the nucleon from lattice QCD. Physical Review D, 2015, 91, .	4.7	12
43	The non-perturbative $O(a)$ -improved action for dynamical Wilson fermions. Nuclear Physics, Section B, Proceedings Supplements, 1998, 63, 853-855.	0.4	11
44	DARK MATTER SEARCH AND THE SCALAR QUARK CONTENTS OF THE NUCLEON. International Journal of Modern Physics E, 2011, 20, 110-117.	1.0	11
45	The hadronic vacuum polarization and automatic $O(a)$ improvement for twisted mass fermions. Journal of High Energy Physics, 2015, 2015, 1.	4.7	9
46	Ruling Out the Massless Up-Quark Solution to the Strong $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle C \langle mml:mi \rangle N \langle mml:mi \rangle f \langle /mml:mi \rangle \langle /mml:math \rangle$ Problem by Computing the Topological Mass Contribution with Lattice QCD. Physical Review Letters, 2020, 125, 232001.	7.8	9
47	Leading-order hadronic contributions to the electron and tau anomalous magnetic moments. European Physical Journal C, 2016, 76, 1.	3.9	6
48	First moment of the flavour octet nucleon parton distribution function using lattice QCD. Journal of High Energy Physics, 2015, 2015, 1.	4.7	5
49	Quark and Gluon Momentum Fractions in the Pion from $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle C \langle mml:msub \rangle N \langle mml:mi \rangle f \langle /mml:mi \rangle \langle /mml:math \rangle = \langle /mml:mo \rangle \langle mml:mn \rangle 2 \langle /mml:mn \rangle \langle /mml:math \rangle$. Physical Review Letters, 2021, 127, 252001.	7.8	5
50	Leading-order hadronic contributions to the lepton anomalous magnetic moments from the lattice. EPJ Web of Conferences, 2016, 118, 01029.	0.3	3
51	Simulation of an ensemble of $N_f = 2 + 1 + 1$ twisted mass cloverimproved fermions at physical quark masses. EPJ Web of Conferences, 2018, 175, 02003.	0.3	3
52	Preliminary results from maximally twisted mass lattice QCD at the physical point. , 2014, , .		3
53	Progress in computing parton distribution functions from the quasi-PDF approach. EPJ Web of Conferences, 2018, 175, 06021.	0.3	2